

Volunteer Geographic Information: How to guide volunteers to produce accurate road network data

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SUMMARY

In recent years the developments on Internet, with web 2 and user-generated content platforms, as well as the widespread use of location-enabled devices, like smartphones or tablets, facilitated the involvement of non-professionals in the production of geographic information. This new type of geographic information, characterized as Volunteered Geographic Information (VGI) by Goodchild in 2007, is produced by crowd (crowdsourced data), whose only motivation is to deliver and distribute ready to use free geographic data through VGI-platforms. Gradually their widespread availability and free acquisition led to their official use by public sector and public bodies and institutes. As VGI data are «geographic» data representing real world phenomena, they should conform to commonly accepted guidelines regarding accuracy (geographic and representation etc.), quality and completeness, while they could be subjected to constraints. In committed volunteer communities professional and experts surveyors, cartographers and geographers are involved in VGI production, thus accuracy, quality and completeness issues are successfully addressed. On the contrary in volunteer communities where experts and professionals are barely or not at all involved, VGI data are inconsistent, inaccurate and of poor quality. Nevertheless VGI data will keep being produced regardless community commitment or professionals and experts involvement due to volunteers' passion to be part in their production. Furthermore VGI usage will keep growing, both by public bodies and private sector as well as by individuals mainly because they are free of charge. Thus it is essential for volunteers to have access to simple guidelines and rules in geographic data production, with scope accuracy and quality assurance. Especially in cases of VGI data derived by satellite or aerial photos, digitization guidelines as well as photointerpretation rules are of imperative need. In this paper simple photointerpretation rules and digitization guidelines for OpenStreetMap volunteers are presented, originated by the poor accuracy and quality of OSM dataset for Athens Municipality in Greece, which were insufficient for scientific use.

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